

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An ultrasonic probe, comprising:
a piezoelectric transducer for sending and receiving an ultrasonic wave; and
a conductive substrate for applying current to the piezoelectric transducer,
wherein the conductive substrate is arranged oppositely to a side face of the
piezoelectric transducer and has an end portion that is arranged outside of the side face of the
piezoelectric transducer;

a conductive material is arranged in [[a]] first and second corner portion portions
formed by the piezoelectric transducer and the conductive substrate, the conductive material
electrically connecting the piezoelectric transducer to the conductive substrate; and

the conductive substrate has a signal wiring and an earth wiring, and a nonconductive
material is arranged on the side face of the piezoelectric transducer between the first and
second corner portions, the nonconductive material insulates insulating a jointed portion of
the piezoelectric transducer with the signal wiring from a jointed portion of the piezoelectric
transducer with the earth wiring.

2-3. (Canceled).

4. (Currently Amended) The ultrasonic probe according to claim 1, wherein
either one of the wirings is electrically connected to a first electrode formed on a
surface side of the piezoelectric transducer by the conductive material arranged in [[a]] the
first corner portion formed by a surface of the piezoelectric transducer and the conductive
substrate, and

the other wiring is electrically connected to a second electrode formed on a back side of the piezoelectric transducer by the conductive material arranged in [[a]] the second corner portion formed by the back of the piezoelectric transducer and the conductive substrate.

5. (Original) The ultrasonic probe according to claim 1,
wherein the conductive material supplied to the corner portion is coated by a nonconductive material.

6. (Original) The ultrasonic probe according to claim 1,
wherein a face of the conductive substrate at a side of the piezoelectric transducer is disposed on a plane equal to a side face of the piezoelectric transducer or a plane spaced from the piezoelectric transducer.

7. (Original) The ultrasonic probe according to claim 1, wherein the conductive substrate is formed flat in the vicinity of the piezoelectric transducer.

8. (Original) The ultrasonic probe according to claim 1, wherein the conductive material is formed in a fillet pattern.

9. (Previously Presented): The ultrasonic probe according to claim 1, wherein the conductive substrate comprises:

a first conductive substrate having the signal wiring for applying current to the piezoelectric transducer; and

a second conductive substrate having the earth wiring for connecting to the piezoelectric transducer,

wherein the first conductive substrate is arranged oppositely to a first side face of the piezoelectric transducer,

the second conductive substrate is arranged oppositely to a second side face of the piezoelectric transducer,

the earth wiring is electrically connected to a first electrode formed on a first main-face side of the piezoelectric transducer by a conductive material arranged in a first corner portion formed by the first conductive substrate,

and the signal wiring is electrically connected to a second electrode formed on a second main-face side of the piezoelectric transducer by a conductive material arranged in a second corner portion formed by the second conductive substrate.

10. (Canceled)

11. (Original) The ultrasonic probe according to claim 9, wherein the conductive material is coated by a nonconductive material.

12. (Original) The ultrasonic probe according to claim 9,

wherein a face of the conductive substrate at a side of the piezoelectric transducer is disposed on a plane equal to a side face of the piezoelectric transducer or a plane spaced from the piezoelectric transducer.

13. (Original) The ultrasonic probe according to claim 9, wherein the conductive material is formed in a fillet pattern.

14-21. (Canceled)